

Abstract of the Disclosure

A hybrid foil-magnetic bearing wherein the foil and magnetic bearing parts share the load at predetermined speeds or operating conditions. Force, flux, strain, temperature, or acceleration sensors provide a measure proportional to actual load on at least one of the bearing parts, and this measure is inputted to a load sharing controller for dividing the load between the bearing parts.

In order to provide control of a hybrid journal bearing which is substantially free of the effects of a bending mode node resulting from magnetic planes on opposite sides of the bearing and of sensor non-collocation, a pair of redundant sensors are provided on opposite sides respectively of the housing for regulating flux on the opposite sides respectively.